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EXAMINER	
JOHNSON, ALAN M	
ART UNIT	**PAPER NUMBER**
2611	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/994,583	CLEARY ET AL.	
	Examiner	Art Unit	
	Alan M. Johnson	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 09/27/02
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US2003/0149988A1) in view of Berberet (US2003/0226150)

As for claim 1 Ellis discloses a method comprising:

storing, in a mass storage device (13 Fig. 2a) and for a predefined period of time, compressed audiovisual data (paragraph 83 lines 9-13, and stored as MPEG-2, paragraph 77 lines 7-19);

in response to a user request, the system provides to the user stored compressed audiovisual data beginning with a portion of the stored compressed audiovisual data having associated with it a first temporal parameter (the user uses the remote to request the display of the program

guide paragraph 116 and the program guide contains information about start and end times of programs paragraph 60);

However Ellis fails to specifically teach a method comprising:

Receiving audiovisual data from a desired transmission channel;

if the audiovisual data is not compressed according to a predetermined format, compressing the received audiovisual data according to the predetermined format;

In an analogous art, Berberet discloses a method comprising:

receiving the audiovisual data from the desired transmission channel (paragraph 122 lines 1-6 and paragraph 130 lines 9-16);

if the audiovisual data is not compressed according to a predetermined format, compressing the received audiovisual data according to the predetermined format (paragraph 130 lines 9-16);

It would have been obvious to one of ordinary skill in the art to modify Ellis's system to include receiving the compressed audiovisual data from the

desired transmission channel and compressing the audiovisual data to a predetermined format if it had not been previously compressed, as taught by Berberet, for the benefit of allowing the server to acquire more programs in addition to the programs that were originally stored on the server which would give the system the ability to supply the subscribers with a very wide range of various content and formatting all received audiovisual data in a standard format.

Dealing with claim 2, Ellis discloses the following:

a system adapted to forward broadcast content to a transport network (18 Fig. 1) for distributing to subscribers (paragraph 59).

a method where in response to a subscriber request for desired broadcast content, storing the desired broadcast content in a server (users issue a record request to the program guide on their local display device, paragraph 85-86);

forwarding the desired broadcast content to the transport network (18 Fig. 1) for distribution to the requesting subscriber (paragraph 91);

a method where in response to a subscriber request for temporally shifted content associated with the desired broadcast content, forwarding the stored broadcast content to the transport network (18 Fig.1) for distribution

to the requesting subscriber (if the subscriber presses the fast-forward button on the remote, the program streaming off the media server will be presented in a temporally shift manner, paragraph 111).

However, Ellis is silent on receiving broadcast content from each of a plurality of content sources.

In an analogous art Berberet teaches receiving broadcast content each from a plurality (1.1 Fig. 2a) of content sources (paragraph 120).

It would have been obvious to one of ordinary skill in the art to modify Ellis's system to include receiving broadcast content from each of a plurality of content sources, as taught by Berberet, for the benefit of allowing the server to acquire more programs in addition to the programs that were originally stored on the server which would give the system the ability to supply the subscribers with a very wide range of various content.

As for claim 3, Ellis and Berberet disclose forwarding to the transport network only the received broadcast content presently requested by any subscriber (Ellis, paragraph 74).

In regards to claim 4, Ellis and Berberet disclose a method of storing, in the server, broadcast content presently requested by a threshold number of subscribers (Ellis, a predetermined number of subscribers must requested a program to be recorded in order for the program to be stored on the remote server paragraph 85-86).

In regards to claim 7, Ellis and Berberet disclose a method wherein the storing of the desired broadcast content comprises storing a version of the desired broadcast content to generate a play track (Ellis, paragraph 91).

Dealing with claim 8, Ellis and Berberet disclose a method of storing selected broadcast content during a predetermined time interval of a broadcast schedule (Ellis, paragraph 76).

With respect to claim 9, Ellis and Berberet disclose a method wherein the storing of the subscriber request for temporally shifted content is initiated by receiving a subscriber title selection from a time shift interactive programming guide screen (Ellis, the program guide includes titles paragraph 60 and requests to record programs using the program guide paragraph 74).

In regards to claim 10, Ellis and Berberet disclose a method wherein the subscriber request for temporarily shifted content is initiated by receiving a

subscriber title selection from a time shift navigation screen (Ellis, paragraph 185).

As for claim 11, Ellis and Berberet disclose a method wherein the subscriber request for temporally shifted content is initiated by receiving a pause or rewind subscriber selection while broadcasting of the desired content (Ellis paragraph 185).

3. Claims 5, 6, 12-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis in view of Berberet in further view of Gordon (US2003/0163824A1).

With respect to claim 5, Ellis and Berberet disclose storing of desired broadcast content (Ellis, a predetermined number of subscribers must requested a program to be recorded in order for the program to be stored on the remote server paragraph 85-86).

However Ellis and Berberet do not specifically teach storing a temporal sub-sampled version of the desired broadcast content to generate a fast/forward track.

In an analogous art, Gordon discloses storing a temporal sub-sampled version of the desired broadcast content to generate a fast/forward track (paragraph 27).

It would have been obvious to one of ordinary skill in the art to modify the combined system of Ellis and Berberet to include storing a temporal sub-sampled version of the desired broadcast content to generate a fast/forward track, as taught by Gordon, for the benefit of increasing the speed at which the fast forward stream is made available.

With respect to claim 6, Ellis and Berberet disclose storing of desired broadcast content (Ellis, a predetermined number of subscribers must requested a program to be recorded in order for the program to be stored on the remote server paragraph 85-86).

However Ellis and Berberet do not specifically teach storing a temporally sub-sampled version of the desired broadcast content in reverse order to generate a reverse track.

In an analogous art, Gordon discloses storing a temporally sub-sampled version of the desired broadcast content in reverse order to generate a reverse track (paragraph 27 and paragraph 33).

It would have been obvious to one of ordinary skill in the art to modify the combined system of Ellis and Berberet to include storing a temporally sub-sampled version of the desired broadcast content in reverse order to generate a reverse track, as taught by Gordon, for the benefit of speeding up the availability of reverse streams.

In regard to claim 12, Ellis discloses the following:

a method for providing video information in an interactive information distribution system to a plurality of subscribers (paragraph 85 and paragraph 68);

selecting a portion of the broadcast programs (only programs that are requested by a threshold amount of users are recorded paragraph 85-86);

processing the selected broadcast programs into temporally adjusted content, such that this temporally adjusted content is associated with the selected broadcast programs (if the subscriber presses the fast-forward button on the remote, the program streaming off the media server will be presented in a temporally shift manner, paragraph 111);

broadcasting the plurality of scheduled broadcast programs to the plurality of subscribers (paragraph 85-86);

a first mode of operation, streaming, on-demand, the temporally adjusted content to those subscribers viewing the selected broadcast programs currently being broadcast, such that the subscribers may interactively activate such temporally adjusted content contemporaneously with the currently broadcast programs (paragraph 165).

However Ellis fails to specifically teach the following:

receiving a plurality of schedule broadcast programs in real-time.

storing the temporally adjusted content.

In an analogous art, Berberet discloses receiving a plurality of schedule broadcast programs in real-time (paragraph 120 and receives program data and simultaneously transmits the program data to the local control units, paragraph 122).

It would have been obvious to one of ordinary skill in the art to modify Ellis's system to include receiving a plurality of schedule broadcast programs in real-time, as taught by Berberet, for the benefit of giving the system the ability to supply the subscribers with a very wide range of various content as soon as it is received at the Head-end.

Ellis and Berberet fail to disclose storing the temporally adjusted content.

In an analogous art, Gordon discloses generating real-time encoded play tracks (Gordon, 202 Fig. 2), fast-forward tracks, rewind tracks (Gordon, 208 Fig. 2), and entry point data (EPD) files associated with each track, the fast-forward tracks and rewind tracks forming the temporally adjusted content (Gordon, In order for the server to transition between play tracks, fast-forward tracks and rewind tracks, Gordon's system inherently has entry point data files associated with each track, paragraph 27) (paragraph 27), generating the EPD files as the fast-forward and rewind tracks are being created (Gordon, In order for the server to transition between play tracks, fast-forward tracks and rewind tracks, Gordon's system inherently has entry point data files associated with each track, paragraph 27) and storing the temporally adjusted content.

It would have been obvious to one of ordinary skill in the art to modify the combined system of Ellis and Berberet to include storing the temporally adjusted content as taught by Gordon, for the benefit of increasing the speed in which the play, fast-forward, and rewind tracks are made available by having them created before they are requested by the user.

As for claim 13, Ellis, Berberet, and Gordon disclose an alternate mode of operation, streaming, on-demand, the temporally adjusted content to those

subscribers viewing the selected broadcast programs previously broadcast, such that the subscribers may interactively activate such temporally adjusted content during viewership of the previously broadcast programs (Ellis, paragraph 163).

With respect to claim 14, Ellis Berberet, and Gordon disclose a method wherein the requesting subscribers may interactively switch between the first and second modes of operation (Ellis, if the desired program is one that has been stored then Ellis's system will use the recorded version if the user desires to rewind past the point where the user indicated he or she wanted to pause the live broadcast program, paragraph 165-166).

In regards to claim 15 Ellis, Berberet, and Gordon discloses a method wherein the selecting step comprises:

> monitoring subscriber viewership (Ellis, the consolidator monitors subscriber viewing choices, paragraph 85-86); and
>
> selecting those broadcast programs having viewership exceeding a predetermined metric (Ellis, only programs that are requested by a threshold amount of users are recorded paragraph 85-86).

As for claim 16, Ellis, Berberet, and Gordon disclose the method wherein the selecting step further comprises:

generating title plans for identifying the broadcast programs to be temporally adjusted (Ellis paragraph 83 lines 7-8); and

defining a temporal availability window for each program (Ellis, the media directory includes a list of the programs recorded paragraph 83 lines 7-15 and temporal availability is the time when the program starts which is included in the program guide information paragraph 60 lines 1-4).

With respect to claim 17, Ellis Berberet, and Gordon teach the processing step which includes generating real-time encoded play tracks (Gordon, 202 Fig. 2), fast-forward tracks, rewind tracks (Gordon, 208 Fig. 2), and entry point data (EPD) files associated with each track, the fast-forward tracks and rewind tracks forming the temporally adjusted content (Gordon, In order for the server to transition between play tracks, fast-forward tracks and rewind tracks, Gordon's system inherently has entry point data files associated with each track, paragraph 27).

With respect to claim 18, Ellis Berberet, and Gordon teach a method wherein the processing step further comprises encoding the broadcast programs identified in the title plan to form the temporally adjusted programs (Ellis paragraph 83 lines 7-8)

Gordon additionally teaches buffering the encoded broadcast programs (Gordon, paragraph 27)

It would have been obvious to one of ordinary skill in the art to modify the combined system of Ells, Berberet and Gordon to include buffering the encoded broadcast programs, as additionally taught by Gordon, for the benefit of ensuring a continuous stream of data to the encoder to prevent minor changes and breaks in the data stream from disturbing the main broadcast stream.

In regard to claim 19, Gordon additionally disclose a method wherein the processing step comprises receiving packetized transport streams from at least one encoder (Gordon, 502 and 508 Fig. 5 shows that after the broadcast stream has been encoded, it is broadcasted to the subscriber and data streams are packetized paragraph 22 lines 8-10) and;

inserting title identification codes (TICs) to each packet to enable the transport streams to be identified as the real-time encoded play tracks, fast-forward tracks, and rewind tracks (Gordon, sequence start and sequence end codes, paragraph 34 and the packets in packetized data streams inherently contain headers paragraph 22).

It would have been obvious to one of ordinary skill in the art to modify the combined system of Ells, Berberet and Gordon to include a method wherein the

processing step comprises receiving packetized transport streams from at least one encoder and inserting title identification codes (TICs) to each packet to enable the transport streams to be identified as the real-time encoded play tracks, fast-forward tracks, and rewind tracks, as additionally taught by Gordon, for the benefit of easing the transmission of the program streams by using a standardized transmission protocol and letting the users receiver easily identify the type of file that it is receiving.

As for claim 20, Ellis, Berberet, and Gordon teach generating the EPD files as the fast-forward and rewind tracks are being created (Gordon, In order for the server to transition between play tracks, fast-forward tracks and rewind tracks, Gordon's system inherently has entry point data files associated with each track, paragraph 27).

Dealing with claim 21, Ellis, Berberet, and Gordon Ellis disclose EDP files that provide transition between streaming of the play, FF and RW tracks at appropriate point in response to user commands (Gordon, the streams inherently contain the equivalent to EPD files since the user can transition between play FF and RW track, paragraph 41).

Dealing with claim 22, Ellis, Berberet and Gordon disclose the following:

a method of wherein the storing step comprises receiving the buffered encoded (Gordon, 206 and 208 Fig. 2) broadcast programs (Gordon, paragraph 27).

storing the real-time play tracks in a plurality of extents (Gordon, N frames means that the tracks can be any number of frames which corresponds to a plurality of extents paragraph 31 and paragraph 35).

storing the fast-forward tracks in extents in a front to back order (Gordon, paragraph 32 and paragraph 35);

storing the rewind tracks in extents in a back to front order (Gordon, paragraph 33 and paragraph 35).

With respect to claim 23, Ellis, Berberet and Gordon disclose a method where the storing step further comprises storing selected broadcast programs from a particular channel for a fixed window of time (Ellis, paragraph 83 the media directory includes a list of the programs recorded lines 7-15 and temporal availability is the time when the program starts which is included in the program guide paragraph 60 lines 1-4).

Dealing with claim 24, Ellis, Berberet and Gordon disclose a method where the storing step further comprises storing selected broadcast programs from a plurality of channels (Ellis, paragraph 88).

As for claim 25, Ellis, Berberet and Gordon disclose a method wherein the first mode of operating further comprises providing an interactive program guide (IPG) to the subscribers having screens presenting the selected broadcast programs having temporally adjusted content for viewing and selection (Ellis, paragraph 60).

In regards to claim 26, Ellis, Berberet and Gordon disclose a method wherein the second mode of operation further comprises providing a navigator list to the subscribers having screens presenting the selected broadcast programs having temporally adjusted content for viewing and selection (Ellis, the media directory keeps track of the temporally adjusted content paragraph 90).

With respect to claim 27, Ellis, Berberet, and Gordon disclose a method wherein the first mode of operation further comprises receiving a temporal control message from a subscriber selected from the group of temporal control messages consisting of pause, rewind, and fast forward (Ellis, paragraph 111).

Dealing with claim 28, Ellis discloses the following:

an apparatus for providing video information in an interactive information distribution system (Ellis, 18 Fig. 1) to a plurality of subscribers (Ellis, paragraph 59);

means for selecting a portion of the broadcast programs (Ellis, only programs that are requested by a threshold amount of users are recorded paragraph 85-86);

means for processing the selected broadcast programs into temporally adjusted content, such that this temporally adjusted content is associated with the selected broadcast programs (Ellis, if the subscriber presses the fast-forward button on the remote, the program streaming off the media server will be presented in a temporally shift manner, paragraph 111).

means for broadcasting the plurality of scheduled broadcast programs to the plurality of subscribers (Ellis, paragraph 85-86).

a first mode of operation, means for streaming, on-demand, the temporally adjusted content to those subscribers viewing the selected broadcast programs currently being broadcast, such that the subscribers may interactively activate such temporally adjusted content contemporaneously with the currently broadcast programs (Ellis paragraph 165).

Ellis fails to specifically teach the following:

a means for receiving a plurality of scheduled broadcast programs in real-time;

a means for storing the temporally adjusted content;

In an analogous art, Berberet discloses a means for receiving a plurality of scheduled broadcast programs in real-time (Berberet, paragraph 120 and receives program data paragraph 122).

It would have been obvious to one of ordinary skill in the art to modify Ellis's system to include a means for receiving a plurality of scheduled broadcast programs in real-time, as taught by Berberet, for the benefit of giving the system the ability to supply the subscribers with a very wide range of various content as soon as it is received at the Head-end.

Ellis and Berberet fail to specifically teach storing a means for storing the temporally adjusted content.

In an analogous art, Gordon discloses a means for storing the temporally adjusted content (Gordon, paragraph 27).

It would have been obvious to one of ordinary skill in the art to modify the combined systems of Ellis and Berberet to include a storing a means for storing the temporally adjusted content, as taught by Gordon, for the benefit of increasing the speed in which the temporally adjusted content is made available by having the temporally adjusted content created before it is requested by the user.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan M. Johnson whose telephone number is (571)272-7916. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on (571)272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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